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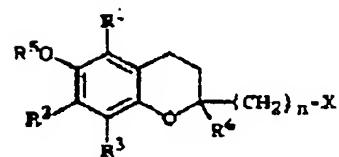
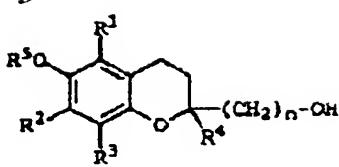
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(54) PRODUCTION OF GLYCOSIDE BY IMMOBILIZED ENZYME

(57)Abstract:



PROBLEM TO BE SOLVED: To produce a water-soluble glycoside in high efficiency by reacting a scarcely water-soluble substance having hydroxyl group and exhibiting excellent physiological activity with a sugar in an organic solvent in the presence of an immobilized enzyme produced by immobilizing an  $\alpha$ -glucosidase on porous chitosan bead.

SOLUTION: The objective water-soluble glycoside having excellent physiological activity such as a chromanol glycoside expressed by formula II [X is glucose residue (H of the hydroxyl group in the glucose residue may be substituted with a 1-8C lower alkyl or a 1-10C lower acyl)] can be produced in high efficiency by reacting a scarcely water-soluble physiologically active substance having hydroxyl group such as a chromanol expressed by formula I (R1 to R4 are each H or a lower alkyl; R5 is H, a lower alkyl or a lower acyl; (n) is an integer of 0-4) with a sugar such as glucose in an organic solvent in the presence of an immobilized enzyme produced by immobilizing 0.01-100mg of an  $\alpha$ -glucosidase [based on 1g of porous chitosan bead (wet state)] on a porous chitosan bead having particle diameter of 0.5-3.0mm.

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LEGAL STATUS

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